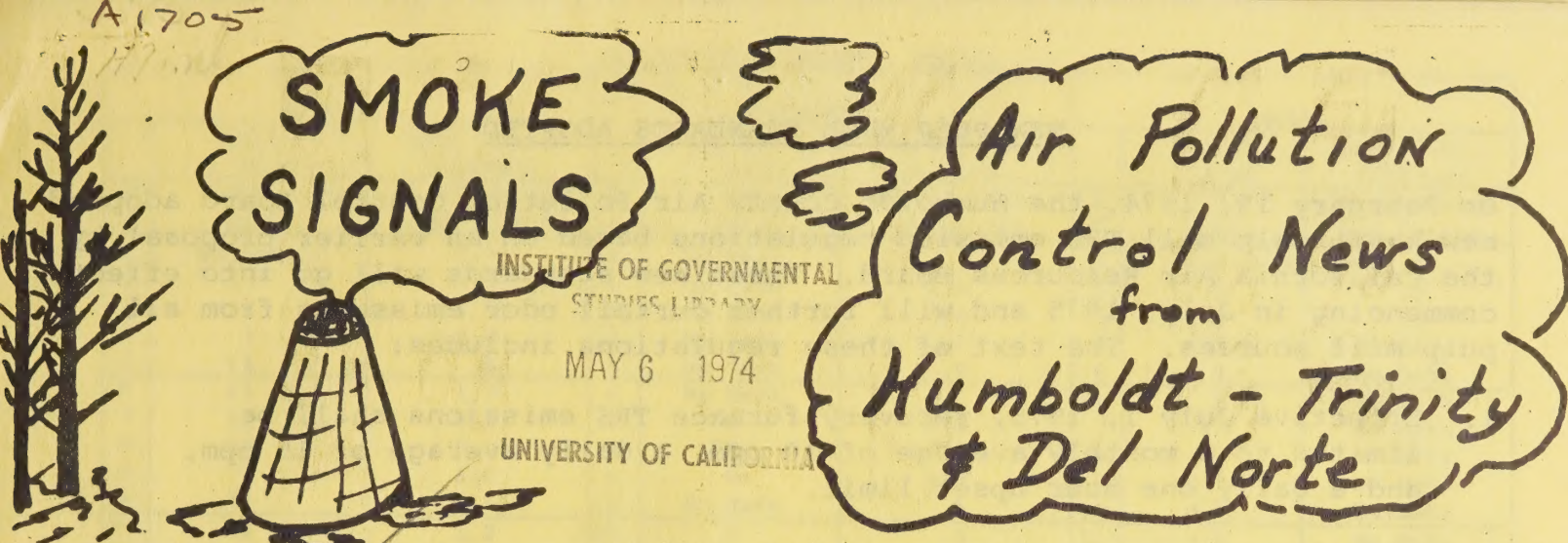




Volume 6, No. 1

5600 South Broadway, Eureka, California 95501

First Quarter - 1974

(707) 445-7273

HEARING BOARD GRANTS FUEL SHORTAGE VARIANCES

At its February 21, 1974 meeting, the Hearing Board of the Humboldt County Air Pollution Control District issued two 90 day variances for tepee burners operated by the McIntosh Lumber Company of Blue Lake and the McAlister Lath Company of Bayside for air pollution problems caused by the recent "energy crisis." Both variances were issued because of lack of auxiliary fuel to assist in rapid burner startup. Three additional tepee burner variances were granted until July 15, 1974 for the Carlotta Lumber Company, Ramey Lath Mill and Boyd's Wood Products. All three operators are developing systems to upgrade or eliminate their existing burners. The Arcata Redwood Company was granted a variance extension until June 15, 1974 to complete their baghouse installation which was delayed by equipment deliveries. The Crown Simpson Pulp Company was granted a variance from the recovery furnace particulate emission standard until December 21, 1974 while installing a new larger transformer on its electrostatic precipitator.

In other Hearing Board actions, the scheduled public hearing regarding alleged public nuisance problems caused by Crown Simpson Pulp Company and the Louisiana-Pacific Corporation was originally scheduled to be held on April 15, 1974, but was continued until a later date by order of the Superior Court. The new hearing date will be set by the Chairman of the Hearing Board.

UNIFIED DISTRICT PLANS SCUTTLED

Further discussions leading to the formation of a Unified North Coast Air Pollution Control District were halted on March 15, 1974 after representatives from the five counties voted to disband their Unified District Formation Committee. This action came as a result of the vote of Humboldt County's Board of Supervisors to not join in a unified district at the present time. Supervisor Peart expressed Humboldt County's willingness to continue to assist other basin counties on a contractual basis and he indicated unification talks may be resumed at a later date.

NEW PULP MILL STANDARDS ADOPTED

On February 19, 1974, the Humboldt County Air Pollution Control Board adopted new kraft pulp mill TRS emission regulations based on an earlier proposal by the California Air Resources Board. These new standards will go into effect commencing in July, 1975 and will further curtail odor emissions from all pulp mill sources. The text of these regulations includes:

1. Effective July 1, 1975, recovery furnace TRS emissions shall be limited to a monthly average of 10 ppm, a daily average of 15 ppm, and a daily one hour upset limit.
2. Effective January 1, 1976, lime kiln TRS emissions shall not exceed 40 ppm or 0.20 pounds TRS per ton of pulp.
3. Effective July 1, 1976, TRS emissions from all other kraft mill sources shall not exceed 20 ppm or a total of 0.20 pounds per ton of pulp.

Those portions of the prior regulations pertaining to control of non-condensibles and continuous monitoring requirements were retained in the new revisions. Additional monitoring reliability studies are presently in progress and compliance schedules are being developed to meet the staggered regulation effective dates.

COMPLAINT SCOREBOARD

Complaints during the past three months remained at their normal low winter levels. With improved pulp mill operations during the past few months, odor complaints are largely grouped on calm days when system upsets occur.

	<u>January</u>	<u>February</u>	<u>March</u>
Smoke	23	21	9
Fallout	4	4	1
Pulp mill odor	10	39	34
Miscellaneous other	2	3	4

STATE SUBVENTION APPLICATIONS FILED

The Humboldt County Air Pollution Control District has filed state subvention funding applications for fiscal 1974-75 for Humboldt, Trinity, and Del Norte Counties. If approved by the California Air Resources Board, local program funding assistance provided by the State of California will amount to \$18,823 for Humboldt County, \$2,777 for Del Norte County and \$1,601 for Trinity County.

AIR QUALITY SUMMARY - EUREKA.

JANUARY			FEBRUARY			MARCH		
	Daily Peak	High 2-hr. Interval		Daily Peak	High 2-hr. Interval		Daily Peak	High 2-hr. Interval
Date	TRS (ppb)	Particulates COH Units*	Date	TRS (ppb)	Particulates COH Units*	Date	TRS (ppb)	Particulates COH Units*
1	No Data	1.7	1	No Data	-	1	< 3	.4
2	< 3	1.3	2	No Data	1.4	2	3	.5
3	4	1.5	3	No Data	.4	3	8	.5
4	7	1.7	4	No Data	.5	4	< 3	No Data
5	< 3	.4	5	No Data	.4	5	< 3	No Data
6	< 3	1.0	6	No Data	1.7	6	9	No Data
7	12	2.3	7	6	2.3	7	17	No Data
8	10	2.5	8	25	2.1	8	36	No Data
9	4	1.8	9	8	1.9	9	< 3	No Data
10	< 3	1.5	10	No Data	.4	10	< 3	No Data
11	< 3	1.2	11	8	.3	11	< 3	No Data
12	< 3	.2	12	5	.9	12	< 3	.5
13	< 3	.2	13	3	1.1	13	< 3	.3
14	< 3	.2	14	No Data	.6	14	No Data	.5
15	< 3	.2	15	No Data	.3	15	No Data	1.1
16	< 3	.2	16	7	.4	16	No Data	.5
17	< 3	.6	17	< 3	.5	17	No Data	.2
18	No Data	.2	18	< 3	.2	18	No Data	.4
19	5	.3	19	13	.8	19	12	.7
20	5	.2	20	< 3	.9	20	< 3	.9
21	5	.6	21	< 3	.2	21	6	.3
22	12	1.1	22	7	.8	22	8	No Data
23	No Data	1.2	23	9	.9	23	6	No Data
24	No Data	1.1	24	10	.8	24	5	No Data
25	6	.4	25	< 3	.7	25	3	No Data
26	18	.4	26	< 3	.3	26	< 3	No Data
27	8	.4	27	< 3	.2	27	< 3	No Data
28	8	.5	28	< 3	.3	28	< 3	No Data
29	< 3	.8	29			29	< 3	No Data
30	< 3	.5	30			30	16	No Data
31	< 3	.4	31			31	< 3	.2
Max	18	2.5	Max	25	2.3	Max	36	1.1

SUSPENDED PARTICULATE MATTER
(Micrograms Per Cubic Meter)*

COUNTY	HUMBOLDT				SONOMA		DEL NORTE	TRINITY
Date	Eureka Health	Eureka Dept. Trans	Arcata Fire Dept.	Samoa	Healdsburg	Cloverdale	Crescent City	Weaverville
Jan. 5	38	31			36	44		
11	60	50	-	-	53	56	-	36
17	58	58			37	41		
23	72	62	63	112	52	47	46	43
29	58	47			62	78		
Feb. 4	-	53	37	-	70	37	25	-
10	66	58			58	57		
16	34	33	-	195	35	30	-	12
22	54	56			53	49		
28	18	13	-	61	19	17	-	19
Mar. 6	37	37			46	19		
12	32	29		229	25	28	105	23
18	51	76			66	55		
24	40	44	39	-	38	38	38	-
30	29	33	25		33	21		
Max.	72	76	63	229	70	78	105	43

*The California maximum allowable value is 100 micrograms per cubic meter for a 24 hour sample.

AIR POLLUTION VIOLATIONS

Ten violation notices were issued during the past three months, mostly for smoke opacity violations by tepee burners.

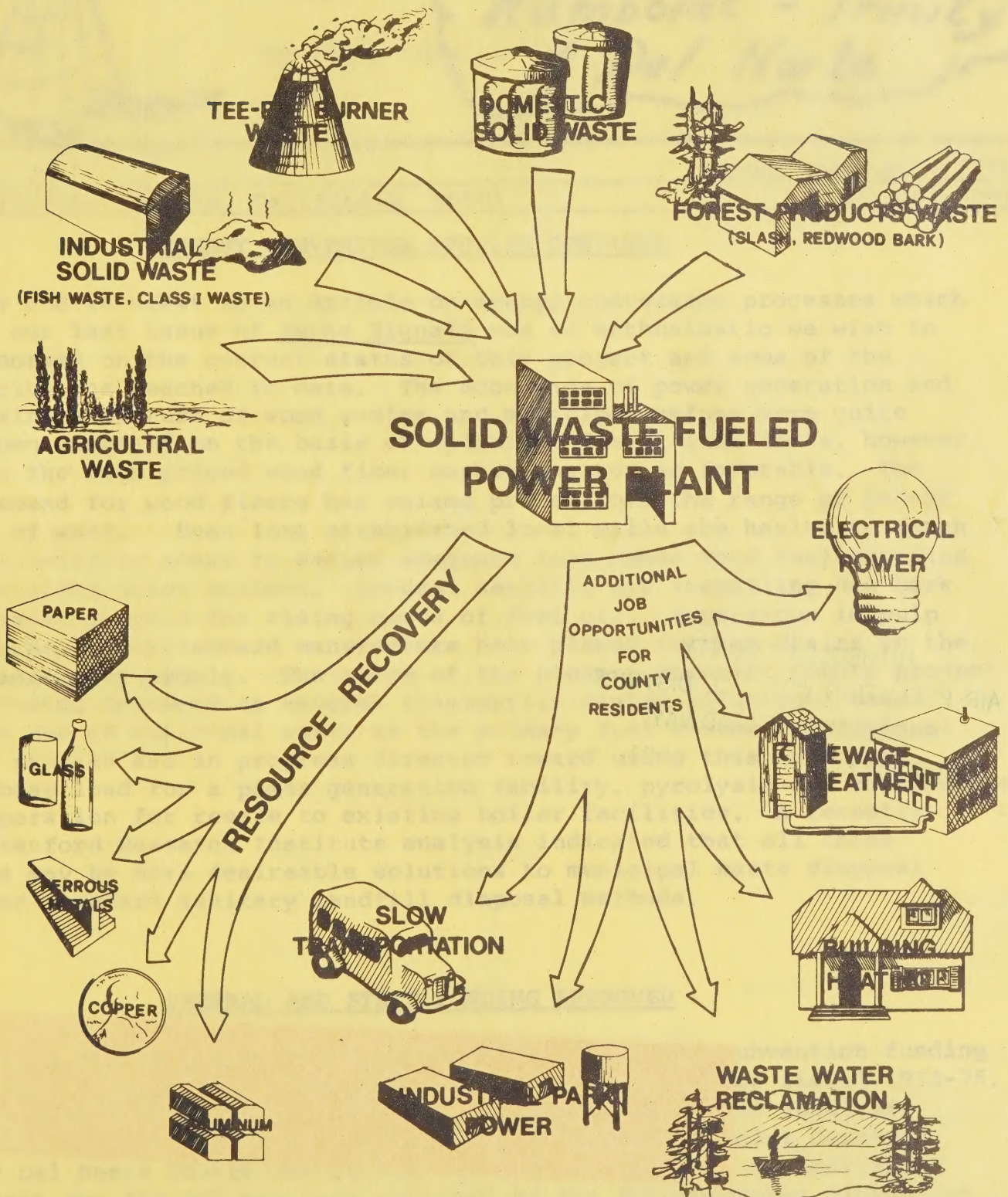
<u>Date</u>	<u>Location</u>	<u>Source</u>	<u>Violation</u>
1- 2-74	Boyd's Wood Prod.	Arcata	Tepee Burner Rule 50-Visual Emissions
1- 3-74	Fortuna Wood Prod.	Fortuna	Tepee Burner Rule 50-Visual Emissions
1-25-74	The Pacific Lbr. Co.	Scotia	Power Boilers Rule 50-Visual Emissions
2-22-74	Morrison & Jackson	Myers Flat	Tepee Burner Rule 50-Visual Emissions
2-22-74	Britt Lumber Co.	Fortuna	Tepee Burner Rule 50-Visual Emissions
2-22-74	Louisiana-Pacific	Carlotta	Tepee Burner Rule 50-Visual Emissions
2-28-74	Mission Fence Co.	Arcata	Tepee Burner Rule 50-Visual Emissions
3- 8-74	Industrial Electric	Arcata	Incinerator Rule 50-Visual Emissions
3-21-74	Lew Jones Const. Co.	Rio Dell	Open Burning Rule 53-Open Fires
3-22-74	Humboldt Grange	Eureka	Incinerator Rule 50-Visual Emissions

ENERGY CONVERSION PROCESSES BEING STUDIED

The Humboldt County Board of Supervisors has appointed a project team consisting of County Administrative Officer, Richard Milbrodt, Public Works Director, Guy Kulstad, and Air Pollution Control Director, Charles Sassenrath, to investigate the feasibility of developing an energy and resource recovery system for Humboldt County and possibly other north coastal areas. With increasing environmental problems and expenses being encountered in developing rural landfills and refuse transfer sites, the disposal of wastes is becoming a major county problem. The potential for resource recovery and energy utilization from municipal and industrial refuse has taken on a new dimension with each new inflationary spiral or fuel price escalation. Humboldt County's position is unique, with tremendous quantities of wood waste also being available for possible energy conversion. Contracts have been signed with the engineering firms of Winzler and Kelly of Eureka and CH₂M - Hill of Corvallis, Oregon, to work out the plant design concepts which may be utilized in the energy and resource recovery system. Preliminary agreements have been made with the Pacific Gas and Electric Company to market the power generation output from a new facility of this type and possible avenues of federal grant funding are being investigated. Although all possible alternatives are being studied, very preliminary economics indicate steam plant incineration and oxygen pyrolysis are the two most feasible plant design approaches.

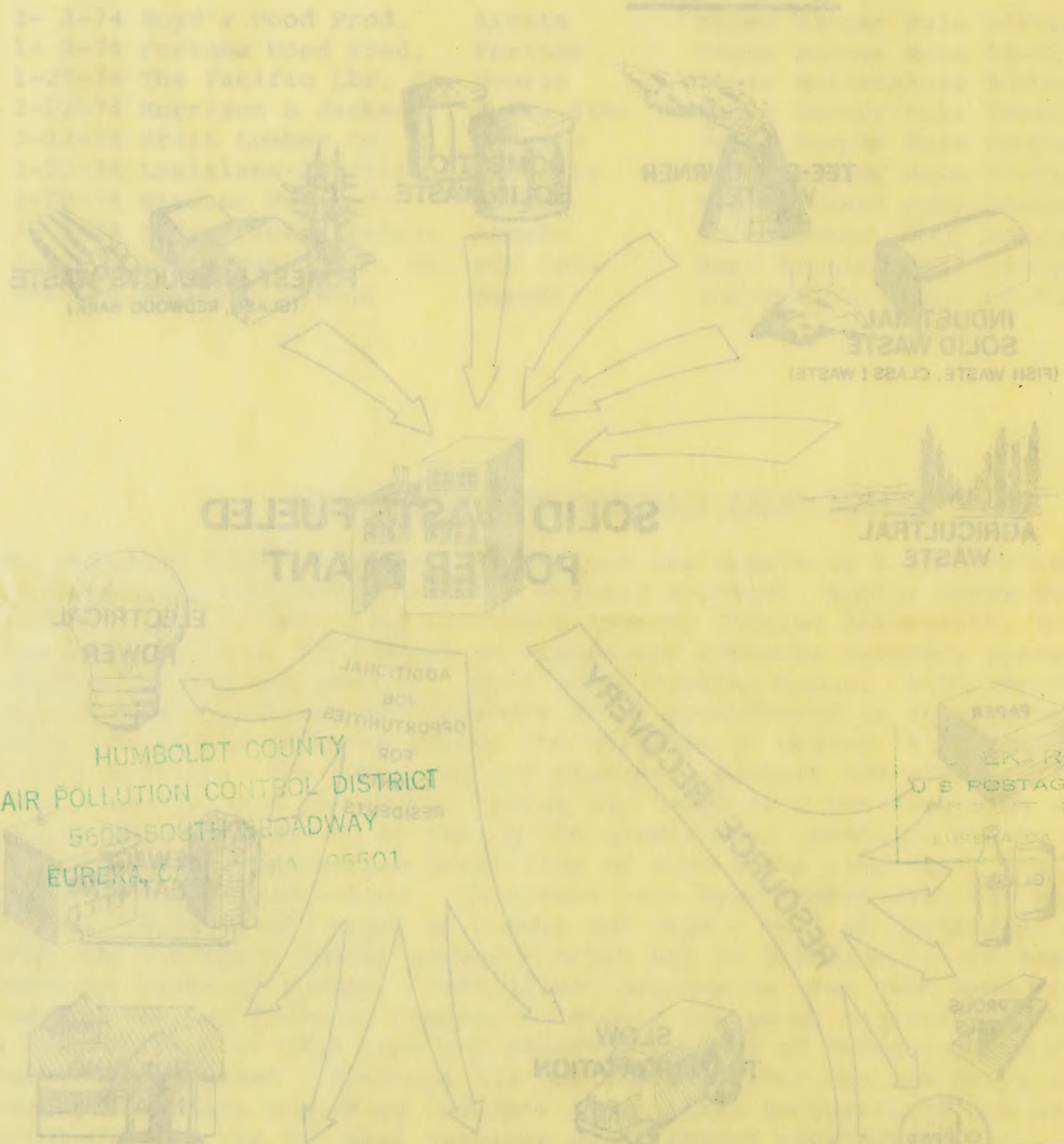
The diagram on the following page depicts the various resource areas and end product uses being studied for the proposed system. Public input is invited concerning other alternatives which may have been overlooked.

RESOURCE - ENERGY SYSTEM

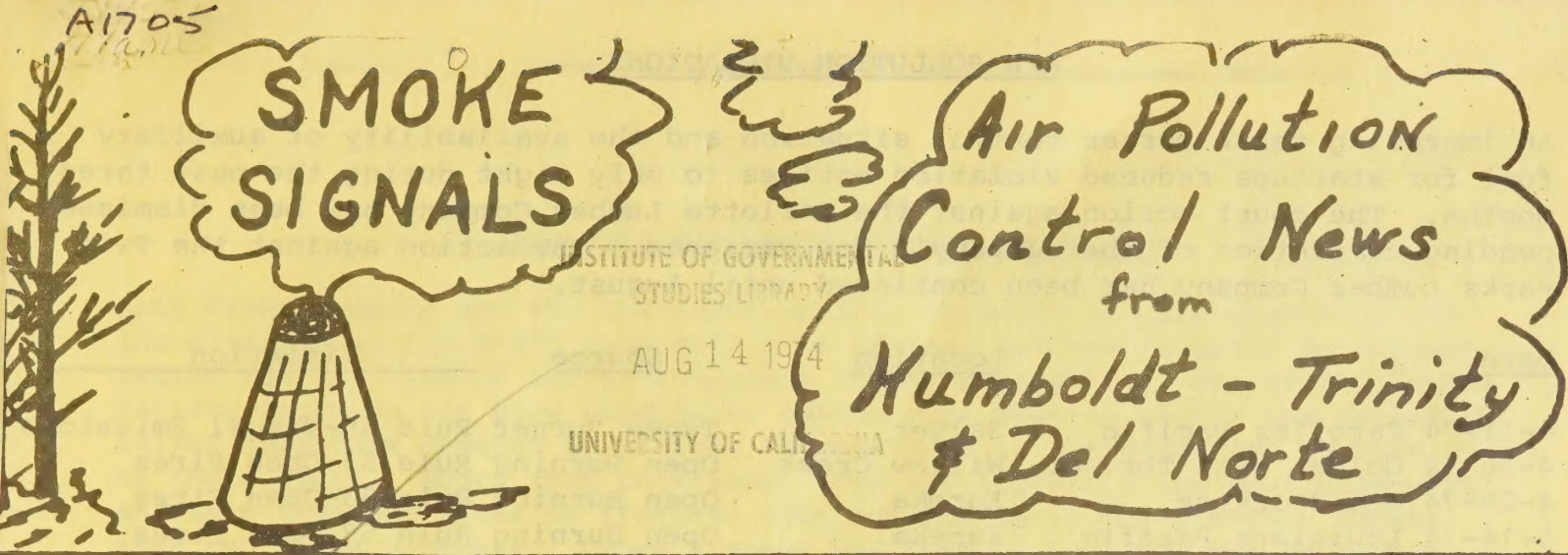


RESOURCE - ENERGY

SYSTEM



LIB INST GOV STUDIES
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BERKELEY CA 94720



Volume 6, No. 2

Second Quarter - 1974

5600 South Broadway, Eureka, California 95501

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ENERGY CONVERSION STUDIES CONTINUE

The response and interest in an article on energy conversion processes which appeared in our last issue of Smoke Signals was so enthusiastic we wish to further elaborate on the current status of this project and some of the general conclusions reached to date. The economics of power generation and pyrolysis using a mixture of wood wastes and municipal refuse were quite favorable when compared on the basis of spiraling fossil fuel costs, however, competing in the high priced wood fiber market was not so favorable. The increased demand for wood fibers has raised prices into the range of \$40-50 per dry ton of wood. Even long established local mills are having to reach farther into outlying areas to secure adequate long range wood fuel supplies for their existing power boilers. Several sawmills are installing new bark burning boilers to avoid the rising costs of fuel oil. Expansions in pulp chip exports and particleboard manufacture have placed further drains on the dwindling waste wood supply. The scope of the present Humboldt County project has been adjusted downward to several alternative design situations based largely upon use of municipal waste as the primary fuel source. Additional engineering studies are in progress directed toward using this municipal waste as a base load for a power generation facility, pyrolysis gas manufacture, or fuel preparation for resale to existing boiler facilities. A recently completed Stanford Research Institute analysis indicated that all three alternatives may be more desirable solutions to municipal waste disposal problems than standard sanitary landfill disposal methods.

FEDERAL AND STATE FUNDING APPROVED

The California Air Resources Board has approved the state subvention funding applications for Humboldt, Trinity and Del Norte Counties for fiscal 1974-75. Funding assistance provided by the State of California to the local air pollution control districts will amount to \$18,823 for Humboldt County, \$2,777 for Del Norte County and \$1,601 for Trinity County. An additional federal grant for \$50,000 has been approved by the Environmental Protection Agency for air pollution control services throughout the North Coast Air Basin.

AIR POLLUTION VIOLATIONS

An improving tepee burner control situation and the availability of auxiliary fuel for startups reduced violation notices to only eight during the past three months. The court action against the Carlotta Lumber Company has been dismissed pending completion of the company's new variance. The action against the Twin Parks Lumber Company has been continued until August.

<u>Date</u>	<u>Location</u>	<u>Source</u>	<u>Violation</u>
4-11-74	Carolina Pacific	Salyer	Tepee Burner Rule 50-Visual Emissions
4-26-74	Golden Bear Tbr. Co.	Willow Creek	Open Burning Rule 53-Open Fires
4-29-74	Bud Stockton	Eureka	Open Burning Rule 53-Open Fires
5-14-74	Louisiana Pacific	Eureka	Open Burning Rule 53-Open Fires
5-15-74	Mark Carter	Eureka	Open Burning Rule 53-Open Fires
5-24-74	Simpson Timber Co.	Fairhaven	Power Boiler Rule 50-Visual Emissions
6-20-74	Englewood Lumber Co.	Redcrest	Tepee Burner Rule 50-Visual Emissions
6-20-74	Halvorsen Lumber Co.	Alton	Tepee Burner Rule 50-Visual Emissions

HEAVY FALLOUT HITS HUMBOLDT COUNTY

An unusually heavy fallout of particulate matter was noted in the Humboldt+ County area during the period June 16-20, 1974. A light brown film, most readily noticed on automobile finishes, was reported from Orick to Petrolia and as far inland as Hoopa. The material appeared to be a mixture of finely divided soil particles and salt crystals. Appearance of the fallout material coincided with violent electrical storms in the Humboldt County area. It is suspected that the heavy fallout was created by electrostatic nucleation of microscopic particles which are continually present in the atmosphere. The electrical charge imparted by lightning caused these small sand, salt and dirt aerosols to agglomerate into larger groupings with enough weight to settle to earth. Examination of the fallout did not indicate any significant amount of radioactivity. Fallout samples have been sent to the California Air Resources Board in Sacramento for a more exact determination of their chemical composition.

COMPLAINT SCOREBOARD

	<u>April</u>	<u>May</u>	<u>June</u>
Smoke	14	28	14
Fallout	5	13	48
Pulp mill odor	39	43	34
Miscellaneous other	0	0	3

NEW AIR POLLUTION ENGINEER JOINS STAFF

Mr. Robert Selfridge has joined the staff of the Humboldt County Air Pollution Control District starting June 3, 1974. Bob is a chemical engineer and will be filling the position vacated by the departure of our Air Pollution Chemist, approximately seven months ago. Bob has had many years of chemical plant experience and most recently was employed by the California Air Resources Board in Sacramento. He will be concentrating most of his efforts on kraft pulp mill monitoring evaluations and related air quality studies.

NEW PULP MILL ODOR SYSTEMS INSTALLED

Both Crown Simpson and the Louisiana-Pacific Corporation have completed the installation of new kraft pulp mill odor control systems in order to further reduce the emission of sulfur compounds to the atmosphere. The new Louisiana Pacific digester hot blow condensing system will greatly reduce the escape of sulfur compounds created by process fluctuations in the digestion section of their plant. Odors from this plant area are typically the most offensive and have been the cause of frequent odor complaints in the downtown Eureka area and along Broadway. Crown Simpson has further reduced odor emissions by the completion of a new washer seal tank vent system. Approximately 100 pounds per day of reduced sulfur compounds which were formerly released into the main stack are now being incinerated in the lime kiln. Both mills have developed compliance schedules to meet the new pulp mill regulations which become effective July 1, 1975. The first phase of these controls will be achieved by new improved secondary black liquor oxidation systems designed to reduce recovery furnace odor emissions far below present levels. A complete evaluation of the effectiveness of these new systems can only be made by continued response from the general public whenever they become troubled by persistent pulp mill odor problems. Telephone calls to our office by private individuals is our best measure of the success of these new odor control programs.

TEPEE TOPICS

Seven tepee burners have joined the inactive list since the first of the year in Humboldt and Del Norte Counties. The demand for wood fibers and hog fuel have been major causes for many of the wood waste utilization programs which are rapidly being developed. Among those companies that have been able to eliminate part or all of their tepee burner operations are Humboldt Fir Company, Enevoldsen Lumber Company, Englewood Lumber Company, McNord Lumber Company, Bob Britt Lumber Company, and the McNamara & Peepe Lumber Company of Crescent City. Many other companies have greatly reduced the quantity of wood wastes sent to their burners. The removal of sawdust and shavings for other more useful purposes has left only bark as the major mill waste product. Even bark is gaining an increasing value as fuel for wood fired boilers and steam generators which should lead to further burner closures before year end. Thus, we see one of the positive indirect benefits of the "energy crisis" on improved air quality in the California North Coast area.

INCINERATOR INSPECTIONS COMPLETED

The program of inspecting incinerators for compliance with the rules and regulations of the HCAPCD has finally been completed. This inspection program commenced several years ago, but was repeatedly delayed because of higher priority projects. Final incinerator permit listings show a total of 155 commercial and industrial incinerators presently operating in the Humboldt Bay Area. During the course of this extensive project, 42 incinerators have been abandoned or removed from service. The increasing salvage value of waste cardboard and paper products has led many large stores to install baling presses for recovery of this valuable resource. Now that this initial incinerator inspection and permit listing has been completed, reinspections will be more readily handled on about a once a year basis.

- 3 -

Tear Here

N O T I C E

Our bulletin mailing list is being revised. If you wish to continue to receive this quarterly publication from the Humboldt, Del Norte and Trinity County Air Pollution Control Districts, please tear off this flap containing your address label and mail to:

Humboldt County Air Pollution Control District
5600 South Broadway
Eureka, California 95501
(Or telephone us at our new number 443-3091)

AIR QUALITY SUMMARY - EUREKA

APRIL				MAY				JUNE			
Date	TRS #1		Particula- tes #2	Date	TRS #1		Particula- tes #2	Date	TRS #1		Particula- tes #2
	Time TRS Detected (Hours)	Time TRS above 10ppb (minutes)	High 2-hr. Interval		Time TRS Detected (Hours)	Time TRS above 10ppb (minutes)	High 2 hr. Interval		Time TRS Detected (Hours)	Time TRS above 10ppb (minutes)	High 2 hr. Interval
1	0.3	0	.4	1	10.4	1	.3	1	5.4	0	.2
2	0	0	.2	2	12.3	8	.2	2	11.3	4	.2
3	2.6	0	.5	3	10.9	24	.3	3	11.5	2	.3
4	0.6	0	.7	4	9.0	20	.4	4	3.7	1	.4
5	0	0	.3	5	8.4	0	.2	5	8.0	0	.2
6	0	0	.4	6	8.9	5	.4	6	11.7	5	.3
7	5.7	4	.2	7	9.5	20	.3	7	10.4	1	.2
8	0	0	.2	8	10.6	2	.2	8	9.4	0	.4
9	12.7	1	.2	9	10.4	6	.3	9	1.5	0	.2
10	7.4	0	.2	10	2.9	0	.4	10	-	-	1.1
11	12.0	7	.2	11	9.4	2	.3	11	3.5	0	.2
12	7.8	0	.2	12	11.9	20	.1	12	5.1	0	.4
13	5.5	44	.5	13	9.0	0	.3	13	0	0	.3
14	7.0	9	.3	14	0.5	0	.4	14	3.0	0	.4
15	16.5	1	.3	15	1.9	2	.2	15	10.8	12	.4
16	8.2	19	.3	16	0.2	0	.4	16	10.2	0	.2
17	0	0	.2	17	0.5	0	.2	17	3.4	1	.2
18	15.6	3	.3	18	3.8	0	.5	18	0.8	0	.2
19	10.7	0	.2	19	4.4	4	.3	19	5.5	0	.3
20	13.2	2	.2	20	8.2	1	.5	20	14.0	7	.3
21	-	-	.2	21	9.5	1	.5	21	5.9	0	.2
22	1.5	0	.3	22	10.6	7	.5	22	12.8	8	.2
23	0	0	.4	23	4.2	2	.4	23	8.1	11	.2
24	0	0	.6	24	7.6	12	.4	24	4.0	0	.2
25	0	0	.2	25	4.7	2	.2	25	7.0	0	.4
26	2.5	0	.3	26	13.5	0	.2	26	6.2	0	.3
27	9.7	20	.3	27	7.8	14	.2	27	14.9	18	.5
28	5.7	0	.2	28	9.0	2	.3	28	4.9	31	.6
29	5.0	11	.9	29	15.1	3	.4	29	0.1	0	.6
30	19.4	1	.2	30	10.3	10	.4	30	11.5	15	.2
31				31	3.3	0	.3	31			
Max	19.4	44	.9	Max	15.1	24	.5	Max	14.9	31	1.1

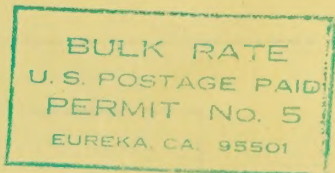
#1 Total Reduced Sulfur

#2 COH units per 1,000 lineal feet of air sampled

SUSPENDED PARTICULATE MATTER
(Micrograms Per Cubic Meter)*

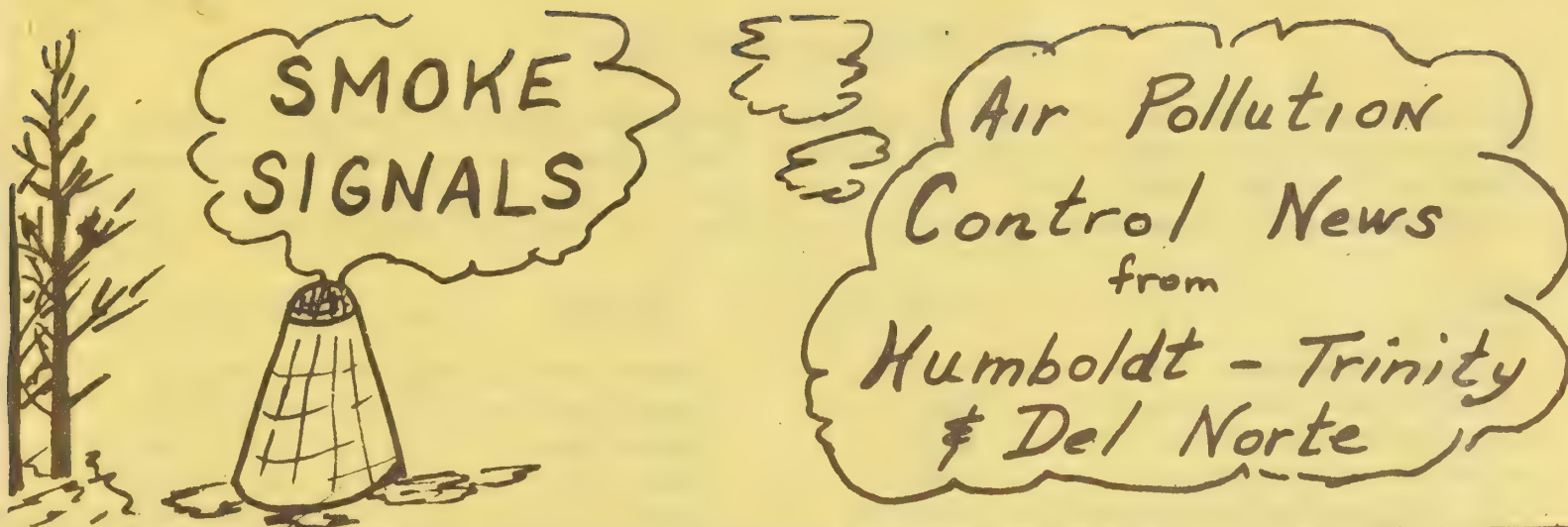
COUNTY	HUMBOLDT				SONOMA		DEL NORTE	TRINITY
Date	Eureka Health	Eureka Dept. Trans	Arcata Fire Dept.	Samoa	Healdsburg	Cloverdale	Crescent City	Weaverville
April 5	49	47	-	-	54	79	57	-
11	63	80			49	35		
17	69	66	68	189	53	44	59	26
23	29	27			50	32		
29	73	122	86	167	60	99	68	-
May 5	41	57			61	50		
11	60	80	70	257	72	37	65	31
17	38	36			48	33		
23	55	83	69	-	87	38	54	25
29	62	99			-	47		
June 4	44	80	50	111			22	-
10	62	127						
16	54	61	105	162			39	33
22	53	70						
28	123	148	89	231			79	25
Max.	123	148	105	257			79	33

*The California maximum allowable value is 100 micrograms per cubic meter for a 24 hour sample.



HUMBOLDT COUNTY
AIR POLLUTION CONTROL DISTRICT
5600 SOUTH BROADWAY
EUREKA, CALIFORNIA 95501

LIB INST GOV STUDIES
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Volume 6, No. 3

Third Quarter - 1974

6600 South Broadway, Eureka, California 95501

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ENERGY CONVERSION PROSPECTS CONTINUE

A final engineering report concerning the proposed Humboldt County energy conversion solid waste disposal plant will be presented to the Humboldt County Board of Supervisors on November 11, 1974 by the consulting engineers, Winzler and Kelly of Eureka and CH₂M - Hill of Corvallis, Oregon. The projected size of this plant has been reduced to the range of 300 - 400 tons per day of mixed municipal and industrial refuse and an electrical generating capacity of about 10,000 kilowatts. Conventional incineration and power generation has been selected as the final plant system design basis, with varying degrees of mill waste usage and resource recovery to be reviewed. Present plans are predicated upon the sale of electric power to the Pacific Gas and Electric Company to finance plant operations, but other power or steam sales outlets are being investigated. Persons who wish to comment on this proposed solid waste facility, are requested to write to our office or appear at the November 11, 1974 Board of Supervisor's meeting in the Humboldt County Courthouse.

INSTITUTE OF GOVERNMENTAL

COUNTIES REQUEST EPA DELEGATION

All five counties in the North Coast Air Basin are requesting EPA delegation of authority to enforce federal new source performance standards (NSPS) and national emission standards for hazardous air pollutants (NESHAPS). The details for adopting these federal standards have been worked out by a special committee composed of representatives from EPA, ARB and the air basin technical committees. If delegation of NSPS and NESHAPS is given to the county air pollution control districts, they will be responsible for administration and enforcement of all relevant federal emission standards. NESHAPS controls are presently limited to emissions of asbestos, beryllium, and mercury. NSPS outlines plant performance requirements for fossil fuel fired steam generators, municipal incinerators, portland cement plants, nitric acid plants, sulfuric acid plants, asphalt concrete plants, petroleum refineries, petroleum storage vessels, secondary lead smelters, brass and bronze ingot production plants, iron and steel plants, and sewage treatment plants.

AIR POLLUTION VIOLATIONS

Thirteen air pollution violation notices were issued during the past three months mostly for excess smoke emissions from tepee burners during extended startup or upset conditions. The action against the Twin Parks Lumber Company resulted in the assessment of a \$500 fine by the Arcata Justice Court.

<u>Date</u>	<u>Location</u>	<u>Source</u>	<u>Violation</u>
7-14-74	Twin Parks Lbr. Co.	Arcata	Tepee Burner Rule 10-No Permit
7-19-74	Sea Breeze Motel	Eureka	Open Burning Rule 53-Open Fires
8- 2-74	Humboldt Fir	Hoopa	Tepee Burner Rule 50-Visual Emissions
8- 5-74	Eureka Const. Co.	Eureka	Open Burning Rule 53-Open Fires
8- 7-74	Fortuna Wood Prod.	Fortuna	Tepee Burner Rule 50-Visual Emissions
8- 7-74	Halvorsen Lumber Co.	Alton	Tepee Burner Rule 50-Visual Emissions
8- 7-74	Carlotta Lumber Co.	Carlotta	Tepee Burner Rule 50-Visual Emissions
8-28-74	Carlotta Lumber Co.	Carlotta	Tepee Burner Rule 50-Visual Emissions
8-29-74	Peterson Lumber Co.	Klamath	Tepee Burner Rule 40-Visual Emissions
9-18-74	O'Hair Const. Co.	Orleans	Asphalt PlantRule 52d-Part. Emissions
9-26-74	Fre-Co. Gifts	Eureka	Dust Systems Rule 10-No Permit
9-30-74	Halvorsen Lbr. Co.	Alton	Tepee Burner Rule 50-Visual Emissions
9-30-74	Louisiana-Pacific	Carlotta	Tepee Burner Rule 50-Visual Emissions

ARCATA REDWOOD BAGHOUSE COMPLETED

The Arcata Redwood Company has completed installation of the largest single baghouse unit in Humboldt County. Their new Wheelabrator - Frye baghouse is designed to clean fine redwood sawdust and shavings from an air flow of approximately 100,000 cubic feet per minute and will control emissions from six cyclone collection systems. The new baghouse was built and installed by Nor Cal Industries of Eureka. Completion of this new dust control system will eliminate approximately 100 tons per year of fine redwood sawdust which was previously released to the atmosphere from the cyclones.

COMPLAINT SCOREBOARD

The Humboldt County Air Pollution Control District has received an increasing number of complaints of smoke and fallout during the past few months caused by several periods of extremely still air. The heavy particulate fallout which was noted during the electrical storms of June 16-20 has been analyzed by the California Air Resources Board and is confirmed to be finely divided soil particles as earlier reported.

	<u>July</u>	<u>August</u>	<u>September</u>
Smoke	16	14	22
Fallout	5	14	11
Pulp mill odor	33	46	30
Miscellaneous other	7	1	5

HEARING BOARD EXTENDS VARIANCES

The Hearing Board of the Humboldt County Air Pollution Control District has extended variances for three lumber companies because of equipment delivery delays. At its September 19, 1974 meeting, the Hearing Board heard testimony relating to the boiler modifications being made by the Pacific Lumber Company and the mulch bagging system being installed by Ramey Lath Mill and Boyd's Wood Products Company of Arcata. The Hearing Board concluded that the three applicants were actively pursuing corrective programs but have met unavoidable delays in equipment deliveries. A variance extension until January 15, 1975 was granted to the Pacific Lumber Company while installing a sand classifier to reduce particulate emissions from its No. 5 power boiler. Variance extensions until November 1, 1974 were granted for tepee burners being operated by Ramey Lath Mill and Boyd's Wood Products.

The Hearing Board set November 7, 1974 as the date on which it will hear testimony regarding alleged public nuisance problems caused by odors emanating from the Crown Simpson Pulp Company and the Louisiana-Pacific Corporation. At this same meeting, the Hearing Board will also consider the compliance schedules developed by the two pulp mills to achieve the new TRS emission standards adopted into Rule 57 by the Humboldt County Air Pollution Control Board.

GASOLINE TANK PERMITS BEING ISSUED

Provisions of the California Health and Safety Code require that all gasoline storage tanks in excess of 250 gallons capacity installed after December 31, 1970, must be equipped with a submerged fill pipe or equivalent type vapor control system. A "submerged fill pipe" means any fill pipe which has its discharge opening entirely submerged when the liquid level is six inches above the bottom of the tank.

Further provisions of the state subvention funding program require that all sources of air pollutant emissions be covered by permits prior to January 1, 1975. The Humboldt County Air Pollution Control District is now in the process of contacting all owners or operators of gasoline storage tanks in excess of 250 gallons capacity in order to complete this permit program before the January 1 deadline. Persons with gasoline tanks above this minimum size are requested to assist in this licensing program in order to document their current gasoline tankage inventory. All new gasoline tanks larger than 40,000 gallons capacity are also subject to additional vapor recovery requirements specified by the Environmental Protection Agency in its new source performance standards.

CARBON MONOXIDE STUDY STARTED

The Humboldt County Air Pollution Control District is cooperating with Caltrans in a monitoring study to determine ambient air concentrations of carbon monoxide in the Eureka area. Air quality data from the Caltrans monitoring station at Wabash and Union Streets is being logged by the staff of the Humboldt County Air Pollution Control District and submitted to the California Air Resources Board for incorporation in their statewide air quality data bank. Federal standards for maximum ambient air concentrations of carbon monoxide specify limits of 9 ppm for an 8 hour period and 35 ppm for a one hour period. The Eureka CO data will be reported quarterly on our air quality summary.

SUSPENDED PARTICULATE MATTER (Micrograms Per Cubic Meter)*

COUNTY	HUMBOLDT				SONOMA		DEL NORTE	TRIUNITY
Date	Eureka Health	Eureka Deot. Trans	Arcata Fire Dept.	Samoa	Healdsburg	Cloverdale	Crescent City	Weaverville
July 4	48	43		49	71	56		
10	43	49	32		56	16	36	
16	40	56			40	18		
22	51	108	93	73	95	43	71	
28	38	36			36	41		
Aug. 3	74	79	73	136			70	
9	97	99						23
15	50	79	59	110			36	
21	47	87						
27	29	31	42	141			24	
Sept. 2	27	35						
8	34	66	35	81			66	20
14	48	64						
20	32	52	56	77			23	46
26	53	75						
Max.	97	108	93	141			71	46

*The California maximum allowable value is 100 micrograms per cubic meter for a 24 hour sample.

AIR QUALITY SUMMARY - EUREKA

JULY				AUGUST				SEPTEMBER			
Date	TRS #1		Particulates #2	Date	TRS #1		Particulates #2	Date	TRS #1		Particulates #2
	Time TRS Detected (Hours)	Time TRS above 10ppb (minutes)	High 2-hr. Interval D.T. E.H.		Time TRS Detected (Hours)	Time TRS above 10ppb (minutes)	High 2-hr. Interval D.T. E.H.		Time TRS Detected (Hours)	Time TRS above 10ppb (minutes)	High 2-hr. Interval D.T. E.H.
1	18.7	10	.3	1	-	0	.4	1	3.1	0	.2 .1
2	1.7	3	.4	2	2.7	0	.6	2	0	0	.2 .2
3	0	0	.2	3	0	0	.2	3	-	-	.3 .2
4	0	0	.2	4	0.5	0	.2	4	-	-	.5 .4
5	0.4	0	.3	5	2.9	6	-	5	-	-	- .3
6	7.7	14	.2	6	9.0	2	-	6	-	-	- .4
7	1.3	0	.2	7	6.5	11	.4	7	4.6	0	- .2
8	0.1	0	.1	8	7.1	2	.4	8	4.5	0	- .2
9	0.4	0	.4	9	2.8	5	.3	9	5.4	10	- .4
10	0.4	0	.2	10	0	0	.3	10	-	-	- .4
11	4.5	8	.5	11	4.7	0	.2	11	-	-	- .7
12	7.9	0	.5	12	8.8	14	.4	12	0	0	- 1.1
13	0.8	0	.2	13	-	-	.8	13	-	-	.2 .3
14	-	-	.3	14	-	-	.3	14	3.8	0	.3 .2
15	-	-	.2	15	-	-	.3	15	-	-	.2 .2
16	0	0	.3	16	0	0	.2	16	1.5	0	.3 .4
17	0	0	.2	17	2.2	0	.2	17	4.6	0	.7 .6
18	5.3	2	.3	18	-	-	.3	18	1.7	0	.4 .5
19	6.0	4	.3	19	-	-	.4	19	3.5	0	.6 .4
20	3.3	0	.4	20	3.6	0	.5	20	8.2	0	- .3
21	11.4	13	.2	21	-	-	.3	21	5.2	0	- .2
22	11.7	0	.7	22	-	-	.6	22	3.3	0	- .2
23	7.5	0	.4	23	11.8	0	.2	23	1.1	0	- .4
24	-	-	.6	24	4.9	0	.2	24	1.4	0	- .5
25	5.9	23	.8	25	0	0	.2	25	4.6	0	.3 .3
26	0.7	0	.5	26	-	-	-	26	0.5	0	.4 .4
27	2.9	0	.2	27	-	-	-	27	0	0	1.3 1.3
28	5.4	0	.1	28	-	-	-	28	2.3	0	.3 .3
29	-	0	.3	29	-	-	.2	29	2.2	0	.5 .5
30	-	0	.2	30	-	-	.3	30	4.4	0	.4 .4
31	-	0	.3	31	12.0	0	.2	31	-	-	-
Max	18.7	23	.8	Max	17.0	14	.8	Max	8.2	10	1.3 1.3

#1 Total Reduced Sulfur

#2 COH units per 1,000 lineal feet of air sampled

D.T. - Eureka Department of Transportation

E.H. - Humboldt County Health Department

2004



SMOKE SIGNALS

INSTITUTE OF GOVERNMENTAL
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FEB 13 1975

UNIVERSITY OF CALIFORNIA

Air Pollution Control News from

Humboldt - Trinity & Del Norte

Vol. 6. No. 4

Fourth Quarter - 1974

SULFUR OXIDES - LOW IN EUREKA

During 1974 forty-two air samples taken in the Eureka area were analyzed to determine the concentration of sulfur oxides in the local area. The highest measurement recorded was 10 parts per billion for a 24 hour average sampling period which is only one-tenth the allowable State standard of 100 parts per billion. High atmospheric concentrations of sulfur oxides are normally found in industrialized areas where high sulfur coal or fuel oil is burned to generate electric power. Copper smelting operations are also responsible for high sulfur oxide emissions.

Sulfur based air pollutants found in the Eureka area are not sulfur oxides, but instead are a family of sulfur compounds which appear in a reduced form, rather than an oxidized form, hence the name total reduced sulfur (TRS). Most prevalent compounds in the reduced sulfur family are hydrogen sulfide, methyl mercaptan and other organic sulfides. Although reduced sulfur compounds do not cause adverse health effects, they do produce a very disagreeable odor and may be detected by the human nose at concentration levels as low as one part per billion. The odor of reduced sulfur compounds has long been a well recognized characteristic of kraft pulp mills, but they are also emitted in high concentrations by oil refineries, sewage treatment plants and natural processes of decaying organic matter.

The Humboldt County Air Pollution Control District operates a monitoring station at Fort Humboldt which measures atmospheric levels of total reduced sulfur and sulfur oxides. The total reduced sulfur concentrations are recorded continuously by a Meloy flame photometric detector and compared with emission monitoring values reported by the two local pulp mills and also compared with odor reports by local citizens. The high hourly readings of total reduced sulfur measured each day are reported quarterly in this bulletin. Persons wishing to learn more about the measurements or reporting methods are welcome to visit our monitoring facility at Fort Humboldt or may call at 443-3091.

BOILER OPERATORS SEMINAR

The Humboldt County Air Pollution Control District is cooperating with the Simpson Timber Company in presenting a 15 hour course of instruction for boiler operators during a six week period starting January 11, 1975. The course is taught by Dr. David Junge from Oregon State University in Corvallis, Oregon and is directed at upgrading the skills and understanding of personnel involved in operation of boilers for steam or power generation. Course instruction will cover a wide variety of subject matter, such as, principles of combustion, combustion characteristics of wood fuels, pollution control systems, applicable control regulations and miscellaneous related boiler features. Enrollment consists of approximately thirty students from industry, engineering, and regulatory agencies.

SOLID WASTE STUDY COMPLETED

The final report on the proposed Humboldt County solid waste-energy conversion plant was presented to the Humboldt County Board of Supervisors on November 12, 1974. This report presented the system design and an economic analysis for the generation of electric power from municipal and industrial solid waste by incineration. The final system chosen incorporated shredding, magnetic separation and screening processes prior to the incineration step. Economic projections showed the energy conversion plant to be slightly less expensive than operating a sanitary landfill in the difficult terrain and climate of the North Coast. Since presentation of the final report, several representatives of local industry have indicated an interest in purchasing the shredded solid waste fuel or using the steam generated from the proposed incineration system. Both these alternatives are being evaluated by the solid waste task force. Engineering proposals are also being solicited for plant funding alternatives, site selection and final solid waste system design.

AIR POLLUTION VIOLATIONS

A total of thirteen violations notices were issued during the past three months. Most of these were for tepee burners which were still being operated following expiration of a Hearing Board Variance. No persistent violations were noted.

<u>Date</u>	<u>Location</u>	<u>Source</u>	<u>Violation</u>
10-24-74	Northcrest Inc.	Crescent City	Tepee Burner Rule 40-Visual Emissions
10-24-74	Standard Plywood	Crescent City	Tepee Burner Rule 40-Visual Emissions
10-25-74	Carlotta Lumber Co.	Carlotta	Tepee Burner Rule 50-Visual Emissions
11- 6-74	Louisiana-Pacific	Carlotta	Tepee Burner Rule 50-Visual Emissions
11-11-74	Ramey Lath Company	Arcata	Tepee Burner Rule 50-Visual Emissions
11-11-74	Boyd's Wood Products	Arcata	Tepee Burner Rule 50-Visual Emissions
11-11-74	Foundation Constr.	Arcata	Pile Driver Rule 50-Visual Emissions
11-18-74	Eureka Forest Prod.	Eureka	Incinerator Rule 50-Visual Emissions
12- 5-74	Louisiana-Pacific	Carlotta	Tepee Burner Rule 50-Visual Emissions
12-10-74	William Chapman	Eureka	Open Burning Rule 53-Open Fires
12-11-74	Cal-Pacific	Weaverville	Tepee Burner Rule 40-Visual Emissions
12-13-74	Simpson Timber Co.	Fairhaven	Power Boiler Rule 50-Visual Emissions
12-20-74	Humboldt Flakeboard	Arcata	Incinerator Rule 50-Visual Emissions

L. P. SCRUBBER COMPLETED

The Louisiana-Pacific Corporation has completed the installation of a new wet scrubber on one of the two wood-fired power boilers at its Samoa plant. This new scrubber unit has reduced stack particulate emissions from a concentration of 0.32 grains per cubic foot to 0.05 grains. The scrubber was designed by L. P. personnel and its performance far exceeded their design expectations. Operation of this new particulate control system will eliminate approximately 400 tons per year of finely divided soot and fly ash which was previously released into the atmosphere.

HEARING BOARD ACTIONS

The Hearing Board of the Del Norte County Air Pollution Control District extended the variances for Standard Plywood Company and Humboldt Forest Products Company from October 31, 1974 until April 30, 1975 because of equipment delivery delays and other job holdups. Both firms are actively installing new wood-fired fuel systems to reduce their dependence on fossil fuel supplies.

In Humboldt County, the Hearing Board developed compliance schedules for the Louisiana-Pacific Corporation and Crown Simpson Pulp Company in accordance with the requirements of new Rule 57 (Sulfide Emission Standard) adopted by the air pollution Control Board on February 19, 1974. These compliance schedules call for several major kraft pulp mill odor emission reduction programs to be completed in the period from July 1, 1975 to July 1, 1976.

The Humboldt County Hearing Board completed its long delayed odor abatement hearing regarding the two local kraft pulp mills on December 10, 1974. Attorneys for both mills filed a stipulation with the Hearing Board which led to the issuance of an odor abatement order in accordance with the provisions of the California Health and Safety Code. Willful or negligent violation of this abatement order could lead to fines of up to \$6,000.00 per day for subsequent public nuisance odor emission violations.

LUMBER INDUSTRY EMPLOYMENT SLUMPS

Unemployment figures for Humboldt County increased to a 16 percent level at the end of 1974, far above the national unemployment average of approximately 7 percent. This increase has been caused by the continued slump in home building activities and its direct effect on lumber products demand. Especially hard hit are the current markets for plywood and other building framing materials. Many sawmills and plywood plants have closed until the economy recovers or greatly curtailed their production rates. Redwood products, which are unique to the California North Coast area, have not been hit as badly by the building slump as other more general types of wood products. Meanwhile, the kraft pulp industry has remained at high production levels, spurred on by increased demand for paper products, although some slackening in these markets has been noted toward year end. North Coast residents are hoping that 1975 will produce a turnaround for the forest products industry and a more stable local economy.

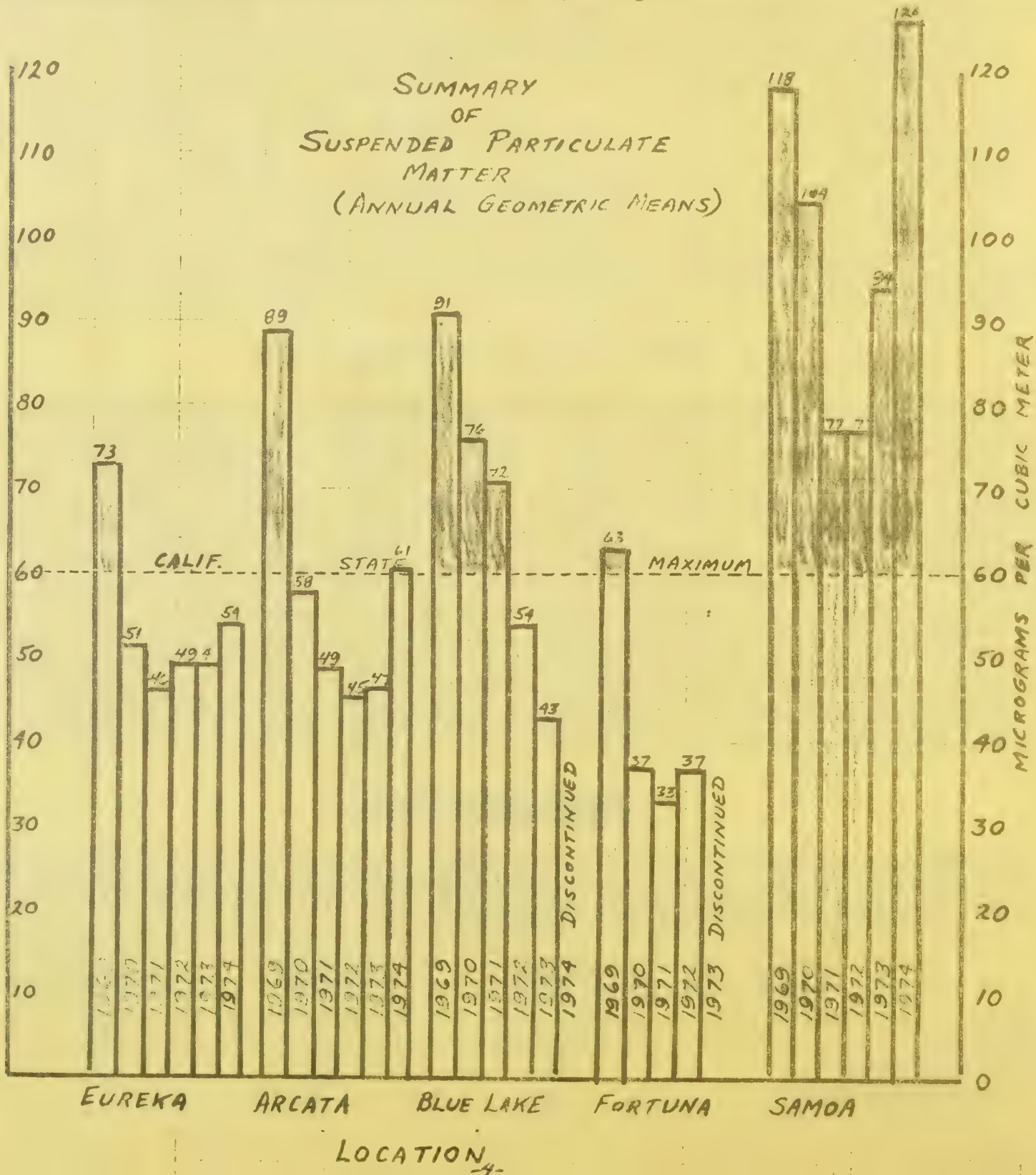
COMPLAINT SCOREBOARD

All complaint categories rose to the highest levels of the year with the extremely mild October weather conditions. These increases also coincided with unexpectedly high air pollutant levels in all categories.

	<u>October</u>	<u>November</u>	<u>December</u>
Smoke	27	14	4
Fallout	11	6	2
Pulp mill odor	58	20	17
Miscellaneous other	6	8	0

AIR QUALITY SUMMARY

Suspended particulate matter readings in Humboldt and Del Norte Counties during 1974 increased by about 10 percent over the levels measured in 1973. Much of this increase is attributed to the unusually dry fall weather conditions experienced on the North Coast in 1974 compared to prior years of high rainfall. The large increase measured in Arcata is suspected to have been caused in part by road dust from the nearby freeway construction activities. New sampling stations have been established in McKinleyville and Trinidad in order to obtain more representative values of North Bay air quality.



SUSPENDED PARTICULATE MATTER
(Micrograms Per Cubic Meter)*

COUNTY	HUMBOLDT				DEL NORTE	TRINITY
Date	Eureka Health	Eureka Dept. Trans	Arcata Fire Dept.	Samoa	Crescent City	Weaverville
Oct. 2	63	139	90	141	112	46
8	82	124				
14	69	106	86	132	-	47
20	105	125				
26	106	-	94	301	87	-
Nov. 1	83	89				
7	64	74	42	165	59	-
13	78	88				
19	105	116	125	246	85	40
25	78	79				
Dec. 1	41	39	66	156	58	40
7	48	58				
13	65	64	52	-	-	22
19	59	54				
25	87	75	59	-	24	36
31	117	124				
Max.	117	139	125	301	112	47

*The California maximum allowable value is 100 micrograms per cubic meter for a 24 hour sample.

AIR QUALITY SUMMARY - EUREKA

October					November					December				
Date	TRS#1	CO	Particulates #2		Date	TRS#1	CO	Particulates #2		Date	TRS#1	CO	Particulates #2	
	High Hr. Average ppb	High Hr. Average ppm	High 2-hr. Interval D.T. E.H.			High Hr. Average ppb	High Hr. Average ppm	High 2-hr. Interval D.T. E.H.			High Hr. Average ppb	High Hr. Average ppm	High 2-hr. Interval D.T. E.H.	
1	4	2	.5 .6		1	3	3	.3 -		1	0	4	.6 .6	
2	-	2	- .6		2	3	4	1.4 -		2	0	3	.3 .2	
3	3	4	- .8		3	-	3	.8 -		3	0	3	.4 .3	
4	1	5	.5 .8		4	1	3	.9 -		4	0	5	.9 .8	
5	2	2	.5 .5		5	1	2	.4 -		5	0	2	.2 .2	
6	5	3	1.1 .8		6	-	4	.8 -		6	0	3	.4 .4	
7	5	10	1.9 1.2		7	1	1	.2 -		7	2	4	1.0 .4	
8	3	2	.5 .6		8	2	5	.8 -		8	0	2	.4 .4	
9	0	4	.7 .9		9	0	3	.5 -		9	1	5	1.0 .9	
10	2	5	1.3 1.0		10	0	2	.4 -		10	0	5	.7 .6	
11	5	2	.5 .4		11	5	4	1.0 -		11	0	3	.5 .3	
12	4	2	.5 .4		12	0	10	1.4 1.2		12	1	2	.6 .6	
13	3	2	.6 .4		13	1	4	.9 .7		13	0	3	.3 .5	
14	5	2	- -		14	4	3	.7 .6		14	4	2	.3 .2	
15	9	8	- -		15	-	2	.4 .6		15	0	1	.3 .2	
16	5	12	- -		16	-	3	.9 .7		16	1	3	.6 .5	
17	2	7	- -		17	0	1	.3 .5		17	0	3	1.0 .6	
18	2	2	- -		18	-	3	- .5		18	0	4	.6 .6	
19	1	3	- -		19	0	4	- .7		19	0	3	- -	
20	1	3	.4 -		20	0	2	- .3		20	0	4	- -	
21	2	9	.5 -		21	1	3	- .6		21	1	1	.3 .2	
22	0	3	1.3 -		22	0	4	- .9		22	0	5	2.0 -	
23	2	7	.4 .6		23	0	4	- .9		23	0	3	2.6 -	
24	4	5	1.1 .9		24	0	3	- .5		24	0	6	2.0 -	
25	1	2	.8 1.1		25	1	7	- .7		25	0	4	1.3 -	
26	2	2	.5 .7		26	0	5	.5 .6		26	0	4	.7 -	
27	1	1	.3 .2		27	1	3	.7 .6		27	-	1	.2 -	
28	2	2	.2 -		28	0	6	1.3 1.3		28	-	2	.4 -	
29	3	2	.3 -		29	2	5	1.2 1.0		29	-	4	1.4 -	
30	0	2	.4 -		30	0	2	1.1 1.3		30	0	4	.9 -	
31	2	2	.2 -		31					31	3	8	1.0 1.1	
Max	9	12	1.9 1.2		Max	5	10	1.4 1.3		Max	4	8	2.6 1.1	

#1 Total Reduced Sulfur

#2 COH units per 1,000 lineal feet of air sampled

D.T. - Eureka Department of Transportation

E.H. - Humboldt County Health Department

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